

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number
WO 2005/056553 A1

(51) International Patent Classification⁷: C07D 477/20 (74) Agent: PARK, Yong Soon; 2nd Floor, No.201, Namdo Bldg., 823-24 Yeoksam-dong, Kangnam-Ku, Seoul 135-938 (KR).

(21) International Application Number: PCT/KR2004/003224

(22) International Filing Date: 9 December 2004 (09.12.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0088857
9 December 2003 (09.12.2003) KR

(71) Applicant (for all designated States except US): CHOONGWAE PHARM.CO. [KR/KR]; 698 Sindaejang-Dong, Dongjak-Gu, Seoul 156-757 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BAE, Hyun Seop [KR/KR]; 112-204 Samik APT, #5-13 Siheung-Dong, Keumchun-Gu, Seoul (KR). HWANG, Tae Seop [KR/KR]; 313-303 Dongsin APT, Yongtong-Dong, Yongtong-Gu, Suwon City (KR). AHN, Chan Yong [KR/KR]; 514-103 Jugong APT, Gojan-Dong, Danwon-Gu, Ansan City (KR). OH, Chang Hoon [KR/KR]; 218-1801 SupsokMaeul APT, Janggok-Dong, Siheung City (KR). KIM, Moo Sung [KR/KR]; 301-204 Samik 3rd APT, Keum-Dong, Keuonsun-Gu, Suwon City (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

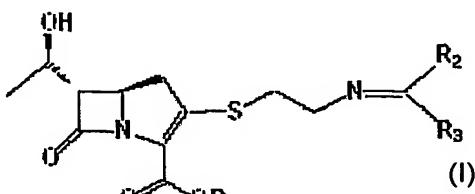
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

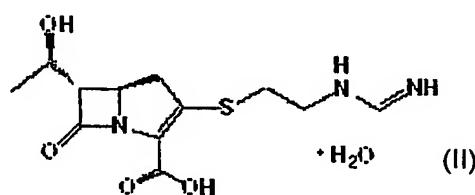
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A NEW PROCESS FOR PREPARATION OF IMIPENEM



(57) Abstract: Disclosed herein is a compound of Formula II below: OH wherein R₁ is a p-nitrobenzyl or p-methoxybenzyl group; and R₂ and R₃ may be identical to or different from each other and are each independently a C₁₋₆alkyl or aryl group, or a derivative thereof, and a process for preparing the compound of Formula II. Further disclosed is a process for preparing imipenem of Formula I below: by using the compound of Formula II.



WO 2005/056553 A1